

**Claims amended under §34**

1. (Amended) A disk apparatus that performs information reproduction by irradiating a laser beam onto a disk recording medium rotated in a CAV system, comprising:

5 a determining means for determining a reference reproduction laser power value by subjecting said disk recording medium to a test writing and a test reading at a first reference linear velocity;

10 a specifying means for specifying an optimal linear velocity coefficient on the basis of a current ambient temperature of said disk recording medium and a linear velocity at a portion to which said laser beam is to be irradiated; and

a calculating means for calculating an optimal reproduction laser power value obtained by multiplying the reference reproduction laser power value determined by said determining means by the optimal linear velocity coefficient specified by said specifying means, wherein,

15 said specifying means specifies said optimal linear velocity coefficient by use of a first relational expression indicative of a relationship between the ambient temperature of said disk recording medium for a second reference linear velocity and a linear velocity coefficient, and a second relational expression indicative of a relationship between said linear velocity coefficient and said linear velocity.

20 2. (Deleted)

3. (Deleted)

25 4. (Amended) A disk apparatus according to claim 1, wherein said reference reproduction laser power value is obtained by adding a predetermined ratio of a lower limit reproduction laser power value to a lower limit reproducible reproduction laser power value.

5. (Amended) A disk apparatus according to claim 1, wherein said reference reproduction laser power value is obtained by subtracting a predetermined ratio of an upper limit reproduction laser power value from an upper limit reproducible reproduction laser power value.

5        6. (Amended) A disk apparatus according to claim 1, wherein said first reference linear velocity is a linear velocity of an innermost periphery in a ZCAV system.

7. (Amended) A disk apparatus according to claim 1, wherein said first reference linear velocity is a linear velocity of an outermost periphery in the ZCAV system.

10       8. (Added) A disk apparatus according to claim 1, wherein said first relational expression is an expression for decreasing a value of said linear velocity coefficient as said ambient temperature increases.